MONTHY COMMUNICABLE DISEASE REPORT

October 2004

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Section I: Top Ten Reportable Diseases in Missouri as of November 9, 2004*

The following data were reported through the MISSOURI HEALTH SURVEILLANCE INFORMATION SYSTEM (MOHSIS) and the TUBERCULOSIS INFORMATION MANAGEMENT SYSTEM (TIMS). For diseases/conditions reported through MOHSIS, counts include confirmed and probable cases only, except for acute Hepatitis C that includes only confirmed cases. For tuberculosis reported through TIMS, counts include only verified cases of tuberculosis disease.

As of Report Week #43 (week ending October 30, 2004), influenza and chronic Hepatitis C were the two most common reportable diseases/conditions in Missouri; with over two thousand reported cases each **(Table 1)**. Campylobacteriosis, salmonellosis, and giardiasis were the next most common diseases with between four hundred and six hundred reported cases each.

Of the ten diseases/conditions with the highest number of reported cases through Report Week #43, the year-to-date case count of five significantly exceeded the 5-year median value **(Table 1)**. These five diseases/conditions were influenza, chronic Hepatitis C, pertussis, and acute and chronic Hepatitis B. The 2004 year-to-date case counts for chronic Hepatitis C, pertussis, and chronic Hepatitis B were substantially higher (i.e., >200%) than the 5-year median value. [NOTE: A portion of this increase may reflect improvements in, or changes to, reporting.] Conversely, the year-to-date case count of three diseases (i.e., salmonellosis, giardiasis, and shigellosis) was significantly below the 5-year median **(Table 1)**.

**** Data analysis in this section does not include sexually transmitted diseases. Additionally, all 2004 communicable disease data presented in this section are provisional.***

Section I: Top Ten Reportable Diseases/Conditions - Continued

Table 1. Top Ten (by Count) Reportable Diseases and/or Conditions in Missouri **– excluding sexually transmitted diseases –** as of November 9, 2004 (through Report Week #43).

Top Ten Disease/Conditions	Year-to-Date Count (2004)	5-Year Median Count (1999-2003)	2004 as a Percent of the 5-Year Median	Crude Rate per 100,000[a]
Influenza	4,322	2,423	178%	77.24
Hepatitis C, chronic infection[b]	2,467	1217	203%	44.09
Campylobacteriosis	565	555	102%	10.10
Salmonellosis	536	631	85%	9.58
Giardiasis	461	563	82%	8.24
Pertussis	269	74	364%	4.81
Hepatitis B, chronic infection[c]	268	96	279%	4.79
Hepatitis B, acute infection	166	119	139%	2.97
Shigellosis	137	319	43%	2.45
Tuberculosis	98	113	87%	1.75

a) Crude rates calculated using 2000 U.S. Census data.

b) Prior to 2002, Hepatitis C, chronic infection was not reportable. As a result, the interpretive utility of the 5-year median value for chronic Hepatitis C is limited.

c) Hepatitis B, chronic infection did not become reportable until 2003. As a result, year-to-date data for 2003 was substituted for the 5-year median value.

Section II: In the Spotlight: Meningococcal Disease

The Etiology of Meningitis.[1] Meningitis is an infection of the fluid surrounding the spinal cord or brain, usually caused by either a viral or bacterial infection. Viral meningitis is generally less severe and resolves without treatment. Conversely, bacterial meningitis can be very severe; possibly resulting in brain damage, hearing loss, or learning disability. Antibiotics can prevent some types of bacteria that cause meningitis from spreading and infecting other people. *Neisseria meningitidis* is a cause of bacterial meningitis, which is of the greatest concern to the public health community.

1. Department of Health and Human Services, Centers for Disease Control and Prevention > National Center for Infectious Diseases > Division of Bacterial and Mycotic Diseases > Meningococcal Disease > General Information. http://www.cdc.gov/ncidod/dbmd/diseaseinfo/meningococcal_g.htm

2. Communicable Disease Investigation Reference Manual – Revised 7/03. Missouri Department of Health and Senior Services, Division of Environmental Health and Communicable Disease Prevention, Section for Communicable Disease Prevention. Jefferson City, Mo. http://www.dhss.mo.gov/CDManual/CDManual.htm

Section II: In the Spotlight: Meningococcal Disease - Continued

The Epidemiology of Meningococcal Disease due to Neisseria Meningitidis.[1,2] In individuals over the age of 2 years common signs and symptoms of meningitis include high fever, headache, and stiff neck. These symptoms can develop over several hours, or one to two days. Other symptoms may include nausea, vomiting, discomfort when looking into bright lights, confusion, and sleepiness. In newborns and small infants fever, headache, and neck stiffness may be absent or difficult to detect. Infants may only appear to be slow or inactive, irritable, have vomiting, or be eating poorly. Patients of any age may have seizures as the disease progresses.

The early diagnosis and treatment of meningitis cases are very important. When symptoms occur, the patient should see a doctor immediately. Diagnosis is usually made from a sample of spinal fluid or blood. Bacterial meningitis can be treated with antibiotics. Antibiotic treatment of most common types of bacterial meningitis should reduce the risk of death from meningitis, although this risk remains higher among the elderly.

Some forms of bacterial meningitis are contagious. Spread may occur through the exchange of respiratory and throat secretions. While meningitis is not as contagious as the common cold or the flu and is not spread by casual contact or breathing the air where a person with meningitis has been, the bacteria that cause meningitis may spread to people who have had close or prolonged contact with a patient with meningitis caused by *N. meningitidis* (also called meningococcal meningitis). Close contacts of an individual with meningitis (such as people in the same household or day-care center, anyone with direct contact with a patient's oral secretions) are at increased risk of acquiring meningitis and should receive antibiotic prophylaxis.

Meningitis cases should be reported to state or local health departments to assure follow-up of close contacts and recognize outbreaks. There are vaccines to protect persons against some strains of *N. meningitides*. The vaccine against *N. meningitidis* is sometimes used to control outbreaks of some types of meningococcal meningitis in the United States. College freshman, especially those who live in dormitories, are at higher risk for meningococcal disease and should be educated about the availability of a safe and effective vaccine that can decrease their risk of contracting meningitis.

3. Missouri Health Information Surveillance System. Missouri Department of Health and Senior Services, Division of Environmental Health and Communicable Disease Prevention, Office of Surveillance. Jefferson City, Mo

Section II: In the Spotlight: Meningococcal Disease - Continued

Meningococcal Disease in Missouri – 2003. In 2003, there were 49 reported cases of confirmed or probable meningococcal disease due to *N. meningitidis*.[3] For meningococcal disease due to *N. meningitidis*; 46.9% of the cases were male and 53.1% female. Considering race; 73.5% identified themselves as white, 2.0% as black, and the remainder did not have a race or ethnicity designation. Although meningococcal disease cases were reported relatively consistently throughout the year, approximately one-third of cases were reported in late winter/early spring (i.e., February and March). One-quarter of cases occurred in children aged 0-4 years, while over one-half occurred in individuals aged less than 25 years. The Eastern Health Region had over one-quarter of reported cases, while the Northwest and Southwest health districts had approximately one-fifth of reported cases each.

Table 2. 2003 Distribution of Reported Cases of Confirmed and Meningococcal Disease; by Month of Report, Age Group, and Health Region.

Month of Event Date	*Percent of Cases*	Age Group	*Percent of Cases*	Health Region	*Percent of Cases*
January	*4.1%*	**0-4**	*24.5%*	**Northwest**	*22.4%*
February	*12.2%*	**5-14**	*6.1%*	**Eastern**	*28.6%*
March	*20.4%*	**15-24**	*24.5%*	**Central**	*16.3%*
April	*6.1%*	**25-34**	*4.1%*	**Southeast**	*8.2%*
May	*2.0%*	**35-44**	*16.3%*	**Southwest**	*20.4%*
June	*12.2%*	**45-54**	*4.1%*	**Out-of-State**	*4.1%*
July	--	**55-64**	*6.1%*	**Unknown**	--
August	*10.2%*	**65-74**	*6.1%*		
September	*6.1%*	**75-84**	*6.1%*		
October	*12.2%*	**85+**	*2.0%*		
November	*8.2%*	**Unknown**	--		
December	*6.1%*				

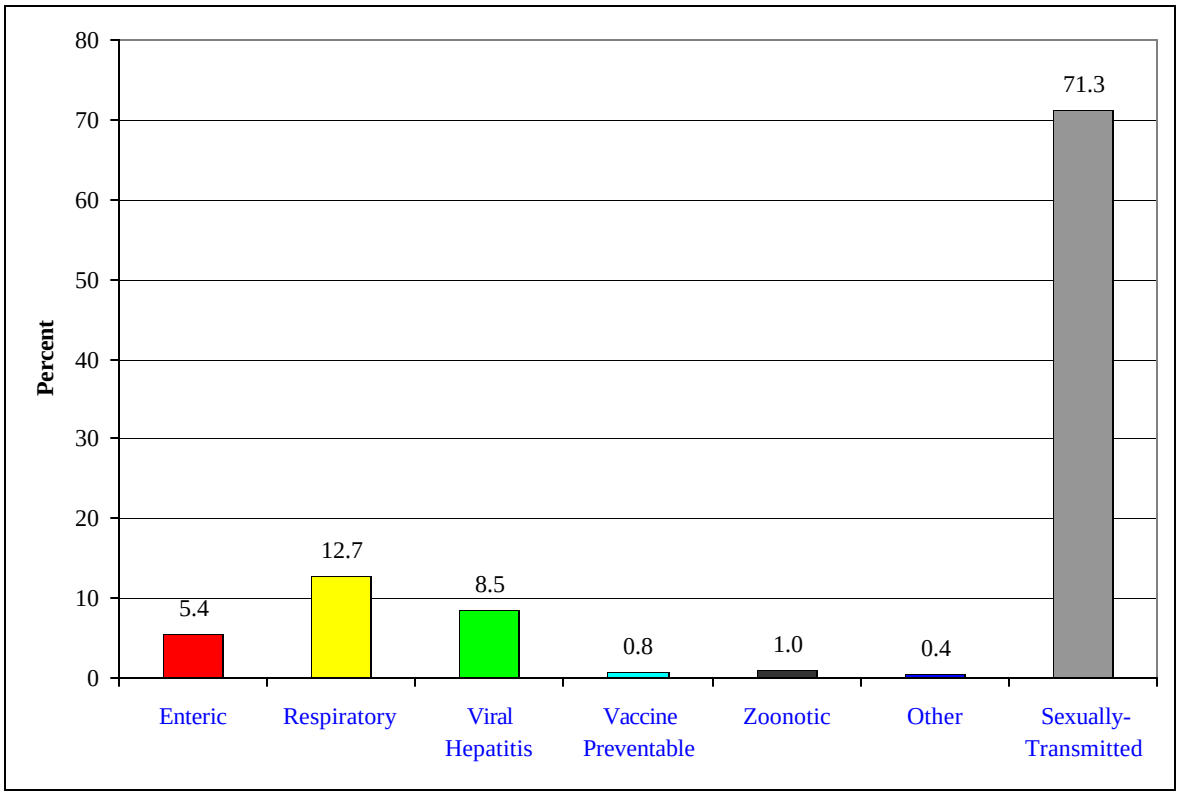
-- Indicates no reported confirmed or probable case(s) in this socio-demographic category.

Section III: Distribution of Reported Cases, by Disease Category*

As of November 9, 2004; sexually-transmitted diseases – excluding HIV – comprised the largest percentage of reported cases (71.3%) through Report Week #43 (week ending October 30, 2004) **(Figure 1)**. Respiratory diseases comprised the next largest percentage of cases (12.7%), followed by viral hepatitis (8.5%) and enteric diseases (5.4%). The remaining disease categories (i.e., vaccine preventable, zoonotic, and other disease) each comprised approximately 1% or less of the total number of reported cases.

* This section does not include data for 'Animal (mammal) bite, wound, humans'. Data for sexually transmitted diseases (STD) are through August 31, 2004. Additionally, all 2004 communicable disease data presented in this section are provisional.

Figure 1. Percentage of Reportable Diseases and/or Conditions in Missouri **– excluding HIV –** reported as of November 9, 2004 (through Report Week #43) – by Disease Category.*



Section IV: Links to other Communicable Disease Surveillance Unit Reports

Other Communicable Disease Surveillance Unit Reports

Report Title	Report Interval	Report Web Location
Summary of Notifiable Diseases in Missouri	annual	http://www.dhss.mo.gov/CommunicableDisease/Reports.html
Previous Communicable Disease Newsletters	monthly	http://www.dhss.mo.gov/CommunicableDisease/Reports.html
Rabies Surveillance	monthly	http://www.dhss.mo.gov/Rabies/index.html
HIV/STD Statistical Reports	various	http://www.dhss.mo.gov/HIV_STD_AIDS/Data.html
Influenza Surveillance	weekly	http://www.dhss.mo.gov/Influenza/Reports.html

* To obtain additional information please contact the Office of Surveillance at (573) 752-9071.

Other Communicable Disease Resources

Resource Title	Resource Web Location
List of Diseases and Conditions Reportable in Missouri	http://www.dhss.mo.gov/CommunicableDisease/reportablediseaselist2.pdf
MDHSS Disease Case Report (CD-1)	http://www.dhss.mo.gov/CDManual/CDappends.pdf
Communicable Disease Investigation Reference Manual	http://www.dhss.mo.gov/CDManual/CDManual.htm
Missouri Information for Community Assessment	http://www.dhss.mo.gov/MICA/nojava.html

Section III: Distribution of Reported Cases, by Disease Category:

Enteric

NUMBER OF REPORTED CASES AS OF NOVEMBER 9, 2004	
ENTERIC DISEASES	
Acute gastrointestinal illness	6
Botulism, infant	1
Campylobacteriosis	565
Cryptosporidiosis	64
Cyclosporiasis	2
Escherichia coli O157:H7	76
E. coli, shiga toxin positive, serogroup non-O157:H7	11
E. coli, shiga toxin positive, not serogrouped	7
Giardiasis	461
Hemolytic uremic sydrome (HUS), post-diarrheal	16
Salmonellosis	536
Shigellosis	137
Typhoid fever (Salmonella typhi)	2
Yersiniosis	14
TOTAL	1898

Section III: Distribution of Reported Cases, by Disease Category:

Respiratory

NUMBER OF REPORTED CASES AS OF NOVEMBER 9, 2004	
RESPIRATORY DISEASES	
Adult respiratory distress syndrome	1
Blastomycosis	2
Coccidioidomycosis	3
Influenza, laboratory-confirmed	4322
Legionellosis	22
Tuberculosis disease	98
TOTAL	4448

Section III: Distribution of Reported Cases, by Disease Category:

Viral Hepatitis

NUMBER OF REPORTED CASES AS OF NOVEMBER 9, 2004	
VIRAL HEPATITIS	
Hepatitis A	38
Hepatitis B, acute	166
Hepatitis B, chronic	268
Hepatitis B Virus Infection, perinatal	0
Hepatitis B surface antigen in pregnant women	25
Hepatitis C, acute	5
Hepatitis C, chronic	2467
Hepatitis non-A, non-B, non-C	2
TOTAL	2971

Section III: Distribution of Reported Cases, by Disease Category:

Vaccine Preventable

NUMBER OF REPORTED CASES AS OF NOVEMBER 9, 2004	
VACCINE PREVENTABLE DISEASES	
Measles (rubeola)	2
Mumps	3
Pertussis	269
Rubella, including congenital syndrome	1
TOTAL	275

Section III: Distribution of Reported Cases, by Disease Category:

Zoonotic

NUMBER OF REPORTED CASES AS OF NOVEMBER 9, 2004	
ZOONOTIC DISEASES	
Brucellosis	3
Ehrlichiosis, human granulocytic	20
Ehrlichiosis, human monocytic	40
Ehrlichiosis, other/unspecified agent	5
Leptospirosis	1
Lyme(-like) disease	49
Malaria	19
Psittacosis	1
Q Fever	2
Rabies, animal	55
Rocky Mountain spotted fever	92
Tularemia	20
West Nile fever and viral encephalitis/meningitis	35
TOTAL	342

Section III: Distribution of Reported Cases, by Disease Category:

Other

NUMBER OF REPORTED CASES AS OF NOVEMBER 9, 2004	
OTHER DISEASES	
Bacterial meningitis, other	7
Meningitis, fungal	1
Meningicoccal disease, invasive	18
Creutzfeldt-Jakob disease	2
Haemophilus influenzae, invasive disease	32
Listeriosis	5
Streptococcal disease, invasive, Group A	56
Streptococcus pneumoniae, invasive in children <5 years	17
Streptococcus pneumoniae, drug resistant invasive disease	12
Toxic shock syndrome, staphylococcal	2
Toxic shock syndrome, streptococcal	0
TOTAL	152

Section III: Distribution of Reported Cases, by Disease Category:

Sexually-Transmitted

NUMBER OF REPORTED CASES AS OF SEPTEMBER 30, 2004	
SEXUALLY-TRANSMITTED DISEASES	
Chlamydia trachomatis infections	17369
Gonorrhea	7446
Syphilis - early	79
Syphilis - latent and duration unknown	131
Syphilis - congenital	2
TOTAL	25027